

## **Fiscal Year 2013 USGS EROS Center High-Priority Goals**

The USGS Earth Resources Observation and Science (EROS) Center mission, *contributing to the understanding of a changing Earth*, is specifically focused on land change monitoring - defined as:

Systematic, continuous measurement, quantification, and explanation of land use, land cover, and land condition that leads to an understanding of the interactions between people and nature.

This mission focus is consistent with the USGS geographic research focus on land change science, and is, consistent with the USGS vision to provide “science for a changing world.”

In June 2012, I presented a challenge to EROS staff to become “...world class investigators who understand the condition of the planet’s landmasses on a space and time scale essential to stakeholder needs”, become “providers of definitive land change information and knowledge for the United States and the world”, and serve as “the world’s land change science experts understanding how the interactions between people and nature lead to changes in land use, land cover, and land condition.” While at the same time, emphasized that “we will continue to view, support, and emphasize Landsat as the centerpiece of our land change monitoring system.”

This challenge is not a substantial topical shift in direction; however, it clearly signaled a new era in which EROS transitions from its historical role as a data and science center to one focused on the provision of land change science information and knowledge. Now is the time, as we proceed with planning for 2013 (2014 and 2015), to establish specific Centerwide goals that clearly define the global land change science monitoring actions that will elevate EROS to higher levels of service to the Nation and around the globe. To that end, the Center’s major goals for FY 2013 are:

### **Landsat Data Continuity Mission (LDCM) Ground System and Mission Operations Readiness**

Sequential ground readiness tests and operations readiness review are successfully executed and the NASA to USGS transition of LDCM Initial Operating Capability (IOC) to Full Operating Capability (FOC) is executed.

### **Support a focused Land Change Monitoring, Assessment and Prediction (LCMAP) science and applications program**

Initiate a Land Change Monitoring, Assessment and Prediction (LCMAP) institutional capability and begin the defining requirements and initial development for a state-of-the-art land change science information system as a core fundamental component of the LCMAP center.

### **Formation of USGS Space Policy for an Operational Program in Land Remote Sensing**

Obtain authorization to proceed in FY 2014 with an operational Landsat program based on the evaluation of technical and programmatic options for obtaining land remote sensing data from space following Landsat 8, including assessing technology and cost options for the Landsat 9 timeframe, and options for transitioning to an operational program in the Landsat 10 timeframe.

### **EROS 40<sup>th</sup> Anniversary Recognition and Enhanced Communication Strategy**

Organize a social event for September 2013 that opens EROS to observation and visit by the

public. The open house will recognize EROS' 40 years (1973 to 2013) of excellence and achievements, while embracing the challenges and opportunities for the next 40 years. The theme is "*EROS - Celebrating Our Past, Embracing Our Future - 40 Years of Service to the Planet.*" Fundamental to the success of 40<sup>th</sup> is implementing an enhanced communication strategy focused on the impacts of EROS activities to society, including the implementation of a web-based training program.

**Operational Release of CDRs (Surface Reflectance and Leaf Area Index) and Terrestrial ECVs**

Develop science-quality, applications-ready, time-series information products of key terrestrial variables using historical and current Landsat data on an operational basis.

**Implementation of Infrastructure for Gathering of the Nation's Remote Sensing User Requirements**

Establish the organizational structure and resources for implementing a well documented, transparent, and consistent process for gathering, analyzing, and applying user requirements.

**Initial Release of 30m Global Land Cover Products**

Establish baseline global high-resolution land cover monitoring properties, coupled with a monitoring strategy that provides annual updates of land cover change. Continuous field data including percent tree, percent barren lands, other vegetation, and water bodies produced using Landsat for the year 2000 and 2010 will be the release in 2013.

**Final Deliverables for Land Carbon Project**

Complete calculation of 1992-2050 annual baseline, reference Carbon stocks, and sequestration for the conterminous U.S.

**Advance a Culture of Innovation Throughout EROS – Innovation Alley**

Provide an opportunity for staff to collaborate and innovate on a wide range of ideas and proposals in a cross-project and Center-wide approach. Innovation Alley - promote and acknowledge our innovation using an Idea Board (white board concept).